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Innovation in Maryland Nursing Education to Meet Anticipated Demand

Policy Strategies to Support Advances in Educating and Building the Nursing Workforce

By the Council for Adult and Experiential Learning

2012

Introduction

On February 16, 2012, Maryland's Lieutenant Governor Anthony Brown addressed a group of nurse educators and health care employers in Maryland, who had gathered to discuss the need for innovation in nursing education. For the last few years, as the state has dealt with high unemployment resulting from the national economic recession, the topic of projected nursing shortages was understandably not high on the state's list of critical labor market concerns. However, as the state emerges from the major economic downturn, and as it prepares for growth in demand for health care resulting from the Affordable Care Act and an aging population, the projected shortage of registered nurses is once again of critical concern.

Maryland's nursing schools have a long history of producing high quality nurse graduates, many of whom go on to practice in some of the nation's best health care facilities. However, these nursing programs are unable to produce the number of new nurses that will be needed, at least not as they are currently structured. Shortages in nurse faculty and in clinical placement sites have limited the capacity of most programs, resulting in many qualified potential nursing students being turned away and unable to attain their professional goals. At the same time, national nursing leaders are urging all nurses to earn bachelor's degrees and higher, echoing similar calls by policy leaders for increased postsecondary attainment for the entire workforce. Indeed, Maryland Governor Martin O'Malley has announced the goal for at least 55% of Marylanders to hold an associate or bachelor's degree by 2025 (Baker & Harris, 2012).

Addressing nursing workforce issues will require broadening the use of innovative approaches to nursing education. Many successful innovations already exist, both in Maryland and in other parts of the country. This policy brief describes these innovative approaches and how the policy leadership in Maryland can help to support the use and expansion of these models and strategies while keeping a sharp focus on educational quality.

The State of the Nursing Workforce Now and in the Future

For almost a decade leading up to the 2008 recession, the message from national and state nursing organizations was that we were facing a great crisis in health care due to the looming shortage of nurses. Maryland was no exception. Projections released by the state's Department of Labor, Licensing and Regulation (DLLR) showed that total RN employment in Maryland was expected to grow 22.3% between 2008 and 2018, and licensed practical and licensed vocational nurse employment was projected to grow 19.1% during that same period (Maryland Health Care Reform Coordinating Council [MHCRCC], 2010). At the same time, Maryland's aging population would be putting pressure on the health care system in two ways. First, the aging of Maryland's popula-

tion would require a greater volume of health services; and second, the aging of health care professionals themselves would result in large numbers of nurses leaving the profession. All evidence pointed to the fact that there would be a significant shortage of nurses.

The recession of the last four years temporarily eased the sense of urgency around the nursing shortage. At the February 16 nursing event, keynote speaker Dr. Peter Buerhaus, Chair of the National Health Care Work Force Commission, noted that during the recession, many experienced RNs filled job vacancies due to the general economic uncertainty. For example, some RNs who had previously retired or otherwise left the workforce rejoined the workforce to protect their economic security. As a result, nursing saw an overall growth in employment numbers, even as so many other occupational categories were shrinking. Dr. Buerhaus referenced his own research showing that with every 1% increase in the national unemployment rate, there is a 1.2% increase in RN employment (or about 33,000 RNs are added to the workforce).

The increase in employment is also a result of overall job growth in the health care industry. Last year, the U.S. Bureau of Labor Statistics (BLS) reported that "the health care industry added 428,000 jobs throughout the 18-month recession from December 2007 until June 2009, and has continued to grow at a steady rate since the end of the recession" (Wood, 2011). This growth is expected to continue: the BLS just released its most recent projections showing that compared to all other occupations, registered nurses are expected to have the largest overall job growth between 2010 and 2020. The number of registered nurses is projected to grow by more than 700,000 in terms of employment nationally during that period (BLS, 2012).

The good news is that RN employment during the recession grew not only because experienced nurses stayed in or came back into the workforce, but also because the number of younger nurses in the nursing workforce grew. This is encouraging because prior to 2002, there had been more than a decade of low entry rates into nursing by young people. Auerbach, Buerhaus, and Staiger report that since 2002 the number of young registered nurses has grown dramatically, at a rate not seen since the 1970s. Between 2002 and 2009 the number of full-time equivalent RNs ages 23–26 increased by 62% (2011, p. 2287). The authors suggest that the number of young nurses entering the profession has partly been made possible by nursing programs that have "developed innovations to increase the appeal of nursing and to make entry into the profession more attainable" (p. 2290).

It would appear that some of the new initiatives launched to address the nursing shortage prior to the recession did have an impact. They successfully changed the makeup of the nursing workforce and brought younger cohorts into the profession. This suggests that a continued and intensified focus on expanding educational opportunities in nursing education can produce the results we need for the future of health care in Maryland.

The Need to Fully Embrace Innovation in Nursing Education

The need to produce new, highly qualified nurses requires all of us to address a number of challenges head-on. These challenges, explained in more detail below, include the capacity of existing nursing education programs, a lack of diversity (in terms of both race and gender) in the nursing profession, the need to deepen the knowledge and skills of new nurses, the need to embrace evidence-based practice, and the need for greater seamlessness between the levels of nursing education as well as collaboration between nursing and other occupations.

- **The lack of capacity.** Currently, nursing schools lack the capacity to take on ever larger numbers of students because of shortages in both nursing faculty and clinical placement sites. The American Association of Colleges of Nursing (AACN) reports that in 2009, U.S. nursing schools turned away 54,991 qualified applicants from bachelor's and graduate nursing programs, and the top two reasons for this were a lack of faculty (61.4%) and insufficient clinical teaching sites (60.8%) (AACN, 2010).

- **The lack of diversity.** Maryland's nursing workforce is currently lacking the racial and ethnic diversity that is represented in the overall population of the state. The chart below, included in a 2010 white paper by the MHCRCC Health Care Workforce Workgroup, shows the percentage of minorities among Maryland's recent nursing graduates—both bachelor's and associate degree preparation levels—as significantly lower than the percentage of minorities in Maryland. This is a national concern as well: while 34% of the U.S. population was minority in 2007, nurses from minority backgrounds represented only 16.8% of the RN workforce in 2008. Men are also underrepresented among nurses (6.2%) (AACN, 2010). According to an April 2000 report prepared by the National Advisory Council on Nurse Education and Practice, a culturally diverse nursing workforce is essential to meeting the health care needs of the nation and reducing the health disparities that exist among minority populations (AACN, 2010). This message was echoed by the 2010 Institute Of Medicine report (p. 4).

Representation of Minorities Among Health Profession
Graduates in Maryland (2008)
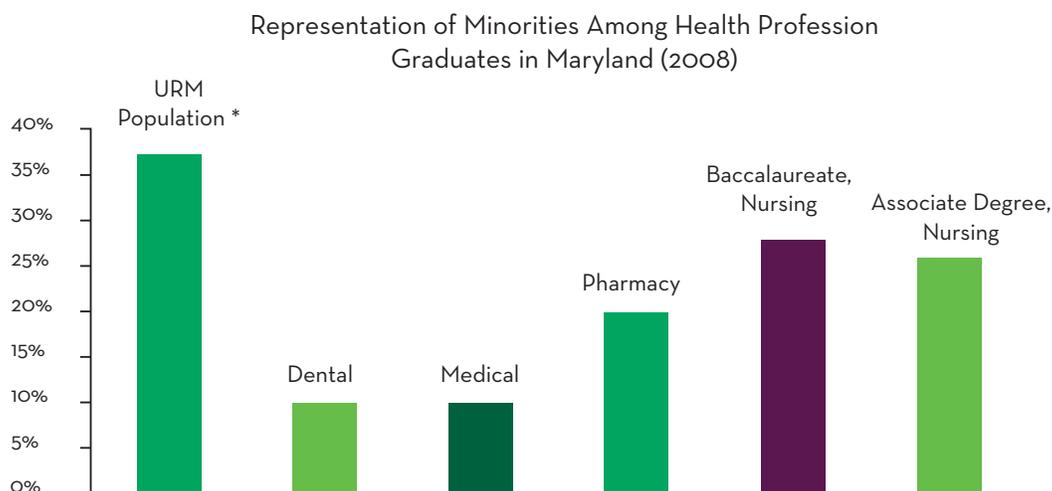
The term "underrepresented minorities" (URM) refers to Black/African-American, Native American, and Hispanic/Latino health profession graduates.
Source: Maryland Vital Statistics, ADEA, AAMC, AACP, MHEC.

- **The need for enhanced student learning.** In 2010, the Carnegie Foundation for the Advancement of Teaching released *Educating Nurses: A Call for Radical Transformation*, in which researchers concluded that nursing students today are undereducated for the demands of practice. The authors' recommendations for reforming education focused on recruiting a more diverse faculty and student body, developing clinical residencies for all new graduates, varying means of assessing student performance, introducing pre-nursing students into nursing earlier in their education, reaching agreement about a set of clinically relevant prerequisites, achieving better integration of classroom and clinical teaching, teaching for a sense of salience, greater emphasis on clinical reasoning, and the formation of a professional identity as a nurse (Benner, Sutphen, Leonard, & Day, 2010).

- **The need to embrace evidence-based practice in clinical education.** There is currently little evidence about what constitutes best practice in clinical education. Yet, some state boards of nursing require a specific number of clinical hours for approval of prelicensure nursing programs, even though there is no published evidence correlating the number of hours with desired outcomes such as NCLEX-RN pass rates or employer satisfaction with performance (MacIntyre, Murray, Teel, & Karshmer, 2009).

- **The need for greater seamlessness between the levels of nursing education as well as between nursing and other occupations.** Prominent voices in nursing education have called for nurses to progress to higher levels of education: from LPN to RN, and from RN to bachelor's, master's, and doctoral degrees. The Institute of Medicine (IOM) recommends that, "Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression" (IOM, 2010, p. 4). Some nursing programs in Maryland and across the country are addressing this through better articulation between associate and bachelor's programs. In addition to current efforts enhancing seamlessness between programs, barriers need to be removed for students entering their RN education from other clinically oriented professions. For example, some military veterans who worked as service corpsmen are interested in studying to be nurses, yet there are few nursing programs that are designed to recognize the very real skills, knowledge, and competencies they already have from their service training and health care experience. In most programs, these student veterans are required to take courses in subjects they already know, sometimes from faculty with less hands-on clinical experience than veterans have from their military experience.

Because of these challenges, it is not enough to say that we should produce more nurses in the state of Maryland. What is needed are new approaches that are truly innovative in the manner by which they enhance the knowledge and educational levels of our nursing workforce while making efficient use of existing state and educational resources.

Models of Innovation

Maryland's existing nursing programs are able to mitigate some of the projected shortages through strategies that have been used in the past. However, in order to adequately address the shortages as well as all of the challenges identified above, Maryland needs to support educational approaches for nursing that do more than just sustain and expand the current structures. What is needed are innovations that transform nursing education in order to achieve greater student learning, greater enrollment capacity, and improved access to the profession, especially for racial and ethnic minorities and men.

At the February convening, attendees learned about several examples of innovation in nursing education from across the country and from Maryland (see list of speakers on page 11). These provide some examples of how programs can be designed differently to focus on and enhance student learning, create greater efficiencies in the use of nurse faculty, and expand access to the profession, all while ensuring excellence in patient care and safety.

- **Maryland State-Funded Nurse Support Program.** Maryland has already taken steps to fund innovation through new partnerships designed to increase the nursing workforce in the state. Beginning in 2005, the Health Services Cost Review Commission (HSCRC) implemented the Nurse Support Program, designed to support initiatives that increased capacity in nursing education programs. The program, funded by an increase of 0.1% of regulated gross patient revenue on an annual basis for 10 years, has resulted in approximately $8.8 million per year for these initiatives over a 10-year period (HSCRC, n.d.; Mary O'Connor, Governor's Workforce Investment Board, personal communication, April 11, 2012). One of the grantees, for example, is the University of Maryland School of Nursing, which has created partnerships with University of Maryland Medical System and Franklin Square Medical System, Anne Arundel Medical Center, Baltimore-Washington Medical Center, Good Samaritan Hospital of Maryland, Mercy Medical Center, Shore Health System (Easton and Cambridge sites), and LifeBridge Health (including Sinai Hospital of Baltimore and Northwest Hospital). The partners are sharing the resources of the hospital systems and School of Nursing to offer online RN-MS and BS-MS programs, practicum experiences, and mentorship to prepare nurses as hospital-based clinical instructor faculty. The program has already shown success with 84 graduates who have continued on as clinical instructors, with increased clinical utilization by partner hospitals, and with an increased number of enrolled students in schools of nursing utilizing partner hospitals (Joan Warren, PhD, RN-BC, NEA-BC, Director of Nursing Research, MedStar Franklin Square Medical Center, personal communication, March 21, 2012).

- **Maryland Hospital Association's Who Will Care? Nurse Education Fund.** In response to the expected shortage of nurses nationwide and in Maryland, hospital, health care and other community leaders joined the Maryland Hospital Association in an innovative effort to address the

problem. The goal of the Who Will Care? Nurse Education Fund is to double the number of nurse graduates in Maryland. Since its inception in 2005, Who Will Care? has raised nearly $17 million from donors across the state to expand the educational capacity of Maryland schools of nursing. In addition to helping schools add classes, hire additional faculty and open new clinical labs, Who Will Care? grantees are steadily increasing the number of students enrolled and graduated. Compared to the 2005-2006 school year, enrollments have already increased by about 1,000 and nurse graduates have increased by over four hundred in the 2010-2011 school year.

- **Oregon Consortium for Nursing Education (OCNE).** In 2001, the public nursing schools in Oregon came together to discuss the need to prepare nurses for a new future. They subsequently worked together to design, from the ground up, a new nursing curriculum based on a common set of concepts. The associate and bachelor's degree granting colleges use the same curriculum, the same set of admissions criteria, and shared faculty. The clinical component provides students with a wide range of placements, from public health projects in beauty shops to learning experiences in acute and chronic care facilities. The result is a system where nurses can progress easily from one program to another, and where employers report that the new graduates possess the necessary clinical skills and critical thinking ability to provide safe and effective nursing care.

- **Excelsior College School of Nursing.** Excelsior College's Associate Degree (AD) in nursing program has offered students an accredited, competency-based approach for close to four decades. It is designed specifically for individuals who are transitioning from an LPN/LVN to an RN role or are coming to their nursing education with significant experience in a clinically oriented health care discipline (e.g., certain classifications of military service corpsmen and paramedics). Students must demonstrate achievement of learning through their performance on a series of psychometrically sound examinations and assessments, including: computer-delivered nursing theory examinations; simulated performance examinations; and highly systematized clinical performance assessments that take place in hospital settings caring for actual adult and pediatric patients. All successful graduates demonstrate theoretical learning and clinical competence, including critical thinking and clinical reasoning, at a level required for beginning practice as an AD-prepared RN. Over 50% of graduates seamlessly move to the RN-BS program, and some also advance to the RN-MS program.

- **Montgomery College**. In Maryland, Montgomery College's Nursing Program has designed an innovation to help LPNs, foreign-trained nurses, and military medics/corpsmen make an easier transition into the nursing profession. A 13-week summer transition course is offered for these incoming students to help them achieve advanced placement. The course provides focused theory and clinical instruction, yet also identifies what the students already know and what they may need to learn. Successful students join second-year students in the fall and are able to earn an associate degree in nursing over a 12-month period.

- **Western Governors University.** Western Governors University's Multi-State Approach to Preparing Registered Nurses (MAP RN) worked in partnership with health care employers nationwide to identify the competencies needed for successful nursing practice, and these competencies formed the basis of the MAP RN curriculum. The program also uses a clinical immersion model that is customized around the calendars of clinical sites so that there are no conflicts with other schools using the same clinical locations. MAP RN is now offered in five states. Significant barriers to expanding to new states are state-level regulations.

Some of the elements that appear frequently in these types of initiatives include:

- A focus on identifying and assessing the student's mastery of the specific, pre-determined competencies required of new nurse graduates

- Progression to higher levels of nursing education through seamless articulation, sometimes achieved through shared curricula

- Development of new models to expand clinical capacity and psychometrically sound means for assessing clinical competence

- Development of collaborations and partnerships to share resources and curricula

- Recognition that some students come to their study of nursing with transferable knowledge and skills that can be assessed and then built upon with additional knowledge and skills needed to earn a degree leading to RN licensure

Guiding Principles for Going Forward

At the February discussion among stakeholders, including nurse educators and employers, on the need for enhancing innovation in nurse education several guiding principles emerged for future work:

- **Variety** — Even as we move towards greater collaboration among nursing programs and employers, we need to continue to ensure that we offer a variety of models and pathways that suit different kinds of learners and learning styles.

- **Community focus** — We need to educate the nursing workforce to work within the community and to view the entire community as the client. Contemporary nursing practice requires knowledge of the concepts fundamental to community health nursing because most health care is provided outside of acute care settings.

- **Cultural competency and caring** — We need to make sure that the nursing workforce has cultural competence and emotional intelligence. This approach to practice requires a knowledge base as well as compassion and caring, which are essential for effective nursing practice.

- **Diversity** — We need to heed the call to have an RN workforce that better reflects the diversity of the population of Maryland. It is particularly important to open pathways for the entry of men and minorities into the profession of nursing.

- **Leadership** — The IOM report on the future of nursing focused on four messages that should guide Maryland strategies:

    1. Nurses should practice to the full extent of their education and training.

    2. Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression.

    3. Nurses should be full partners, with physicians and other health care professionals, in redesigning health care in the United States.

    4. Effective workforce planning and policy making require better data collection and information infrastructure (IOM, 2010, p. 4).

Policy Recommendations for Maryland

Finally, emerging from the discussion among the attendees of the February event on innovation in Maryland's nursing education were several specific policy recommendations for the state, particularly as policy makers consider how to provide leadership for the state's goal to meet the health care demands of the future, while also reaching the goal of having 55% of Maryland's citizens attain a postsecondary degree by 2025.

Recommendation 1	**Encourage greater collaboration and articulation** so that there is more seamlessness between and among programs, particularly in the progression from associate to bachelor's levels.
Recommendation 2	**Focus more on competencies and learning outcomes** and less on measuring time spent in learning activities and teaching strategies. Metrics that measure everything in terms of time and process provide data that may or may not have meaning for all learners.

Recommendation 3	**Engage health care employers and other stakeholders** to become part of the solution to the coming nursing shortage and the need for nurses with higher levels of education.
	
	    a. Employers could:
	        i. Provide salary or other incentives to RNs to continue on for the BSN. Some employers currently do not compensate bachelor's-prepared nurses at a higher rate.
	        ii. Offer residencies and other transition positions for new graduates.
	        iii. Allow nurses to practice to their full scope of practice and function as knowledge workers and decision makers.
	    b. Other stakeholders could carry out public relations strategies that educate Marylanders about nursing careers, particularly focusing on men and ethnically diverse groups.

Recommendation 4	**Rely on data and other measurable evidence** to track our progress in educating nurses and expanding our capacity, gain a better understanding of the numbers of students who apply and are rejected due to capacity issues in Maryland-based programs, and identify education models and strategies with proven results.
Recommendation 5	**Encourage regulators to make evidence-based decisions** regarding standards for program approval and nursing licensure rather than relying primarily on current practice.

Conclusion

Maryland's health care system needs to prepare for the anticipated increased health care demand at a time when many in its nursing workforce are preparing to retire. Given the limited capacity of existing nursing education programs, all stakeholders need to embrace new ways to deliver nursing education and innovation in how our programs are structured.

Traditional models of nursing education need to be augmented by new models featuring collaboration, demonstrations of student competency, and recognition of prior learning. To actualize the IOM recommendations, a spectrum of options encouraging individuals who aspire to furthering their education is needed. In addition, we need to provide pathways for experienced students to build on their prior learning to become registered nurses.

Removing barriers to successful innovations in nursing education is critical, while also expanding our outreach efforts to underrepresented groups, particularly minorities and men. Through innovations and new approaches to nursing education, we will meet the anticipated demand with a well-educated and high-performing nursing workforce.

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Featured speakers at "Developing Innovative Pathways into Nursing Profession," February 16, 2012

- Anthony Brown, Lt. Governor of Maryland

- Peter Buerhaus, Professor of Nursing, Vanderbilt University Medical Center and Chair, National Health Care Workforce Commission

- Jan Jones-Schenk, Chief Nursing Officer/National Director of Nursing, Western Governors University

- Carole Kenner, Dean, School of Nursing, Northeastern University

- Mary Lee Pollard, Dean, School of Nursing, Excelsior College

- Carol Thorn, Chair, Department of Nursing, Clackamus Community College, Oregon Health Sciences University

- Gail Schoen Lemaire, Associate Professor, Director, Clinical Nurse Leader Program, University of Maryland School of Nursing

- Kevin Nies, Director of Admissions, University of Maryland School of Nursing

- Ronald Hearn, Executive Director, BACH

- Deborah Rowe, Senior Director, Genesis HealthCare

- Beth Batturs, Director of Nursing and Healthcare Initiatives, Anne Arundel Community College

- Monique Alston-Davis, Assistant Professor of Nursing, Montgomery College

- Joan Warren, Director, Nursing Research, Franklin Square Hospital

- Mary Etta Mills, Professor of Nursing, University of Maryland School of Nursing

- Zelia Taylor-Pearson, Special Projects/Marketing Coordinator, Veterans Health Administration OI Innovation Program

- Jeffrey Satori, Senior Clinical Informatics Analyst, Health Informatics Initiative, Veterans Health Administration OI Innovation Program

Speaker Introductions

- Claire Smith, Dean, Health Professions, Wellness & Physical Education, Anne Arundel Community College

- Janet Allan, Dean, University of Maryland School of Nursing

- Carmela Coyle, President, Maryland Hospital Association

- Marcia Floyd, Director, ERC, Sinai Hospital
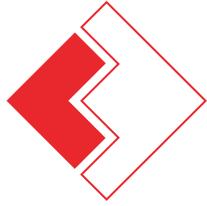
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